

# INSTALLATION AND TUNING GUIDE

## PDRIVE PRIMARY CLUTCH REBUILD KIT

# PART NUMBER(s): PDPRIREBKIT

WE ARE NOT RESPONSIBLE FOR ANY DAMAGES. BE VERY CAREFUL TO NOT DAMAGE YOUR CLUTCH DURING THIS PROCESS.

#### TOOLS NEEDED

- 1/2" Drive Impact Gun
- 22mm or 7/8" Wrench
- 17mm 1/2" Drive Socket
- 13mm- 1/2" Drive Socket
- Torque Wrench
- 6mm Allen Wrench
- T30 Torx
- T40 Torx
- KWI MAVTOOL V2 clutch tool set or equivalent
- Clutch Belt removal tool
- Blue Locktite
- Vorhees Vise clutch holding tool or equivalent



### ESTIMATED INSTALL TIME

**60 MINUTES** 

#### Removing and installing primary clutch (PDrive and QRSX)

- 1) Remove belt box cover. (T30 Torx)
- 2) Remove CVT belt. (Clutch Belt removal tool)
- 3) Remove primary clutch bolt. (22mm 1/2" Drive Impact Socket)
- 4) Thread clutch puller into primary clutch and tighten until clutch pops off crankshaft. (14mm or 9/16"
- -1/2" Drive Impact Socket)(1/2" Drive Impact Gun)
- 5) Clean crankshaft and clutch taper with acetone or brake cleaner.
- 6) Secure primary clutch on crankshaft by torquing the primary clutch bolt to bolt manufacturer
- specs.(22mm or 7/8" -1/2" Drive Socket)(Torque Wrench)
- 7) Reinstall CVT belt and belt box cover.

### Primary clutch disassembly and reassembly (PDrive)

- 1) Remove primary clutch. (See "Removing and installing primary clutch")
- 2) Thread clutch puller all the way in by hand and then back out 4 turns.
- 3) Remove 6 each Torx screws holding governor cup cap to governor cup.(T40 Torx)
- 4) Put Moly grease on the top of the primary puller and on the threads of puller cup bolt.

5) Insert puller cup into puller plate and secure to governor cup cap using 6 each M8 bolts.(6mm Allen Wrench)

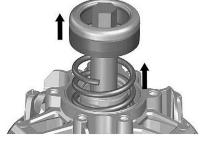
- 6) Tighten puller cup bolt until governor cup plate pops off its taper. (STOP TIGHTENING AS SOON
- AS IT POPS)(1/2" Drive Impact Gun)(24mm or 15/16" 1/2" Drive Impact Socket)
- 7) Remove puller cup, puller plate clutch puller and governor cup plate.

# Primary clutch disassembly and reassembly (PDrive) - CONTINUED-

8) Place circlip remover/installer on top of spring retainer, install threaded rod through circlip installer/ remover and screw into clutch approx 10 turns. Turn nut in to compress spring and take tension off of circlip. Remove circlip. Turn nut out to relax spring tension. Remove threaded rod, circlip installer/remover and disassemble clutch as required. (22mm or 7/8" - Wrench)

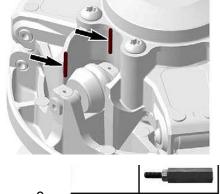
Reassemble in reverse order. Use threaded rod and tool disc to hold primary while torguing. All tapers will 9) lock upon clutch installation to crankshaft.



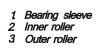


#### Install cone roller replacement kit

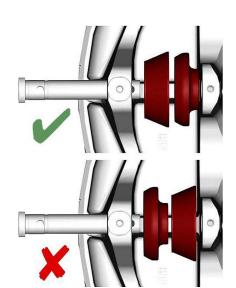
Carefully pull out dowels by using a pliers, dis-card them. 1)



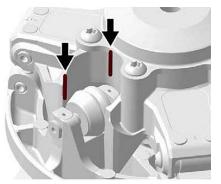
2) Screw in the KWI "Hammer" puller tool and remove bearing sleeve, then remove inner and outer rollers.

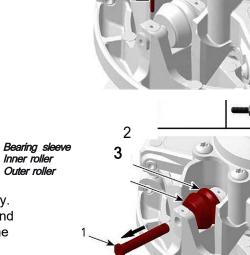


3) Position the flat sides of the bearing sleeve head vertically. 4) Push a new bearing sleeve back in place thru the inner and outer roller. Tap with a hammer and use a small wrench to turn the bearing sleeve to line up dowel holes 5) Tap in new dowels



The dowels must have a tight press fit in their bores in the sliding sheave, loosen dowels due to worn bores may cause severe CVT damage. Always replace dowels by new ones.



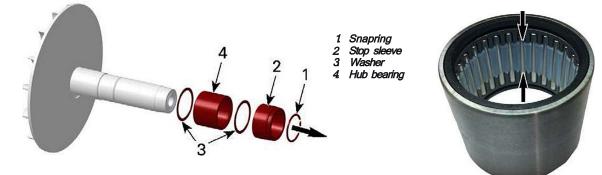


### Replace bearing thrust washers and lubricate bearing

- 1) Remove snap ring.
- 2) Slide off stop sleeve, hub bearing and 2 thrust washers
- 3) Throughly clean clutch shaft, stop sleeve and bearing with brake cleaner.
- 4) Apply a LIGHT coat of grease to the center of the bearing rollers only- DO NOT PACK WITH

GREASE! Make sure all thrust washers and the sides and top of bearing are COMPLETELY GREASE FREE prior to installation.

5) Reassemble components onto clutch shaft using new thrust washers and secure with snap ring.



#### Install governor cup roller replacement kit

1) Remove torx screw securing the roller pin from each of the 3 rollers.

2) Screw the KWI "hammer" into the opposite side of the governor cup roller pin and remove the roller pins.

3) Remove the rollers and 2 thrust washers for each roller (the rollers and pins will not be re-used).

4) Install new rollers and thrust washers using new pins and torx screws provided. Torque per the torque chart on page 5.





#### **Reassemble primary clutch**

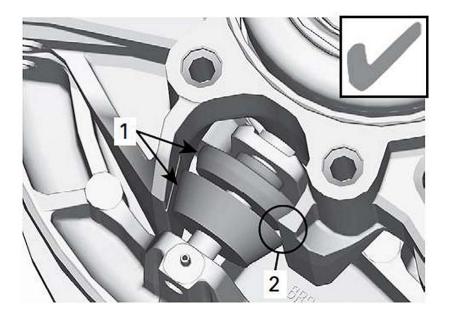
- 1) Remove snap ring.
- 2) Slide off stop sleeve, hub bearing and 2 thrust washers
- 3) Throughly clean clutch shaft, stop sleeve and bearing with brake cleaner.
- 4) Apply a LIGHT coat of grease to the bearing rollers only- DO NOT PACK WITH GREASE!

Make sure all thrust washers, sides and top of bearing are COMPLETELY GREASE FREE prior to installation.

5) Reassemble components onto clutch shaft using new thrust washers and secure with snap ring.

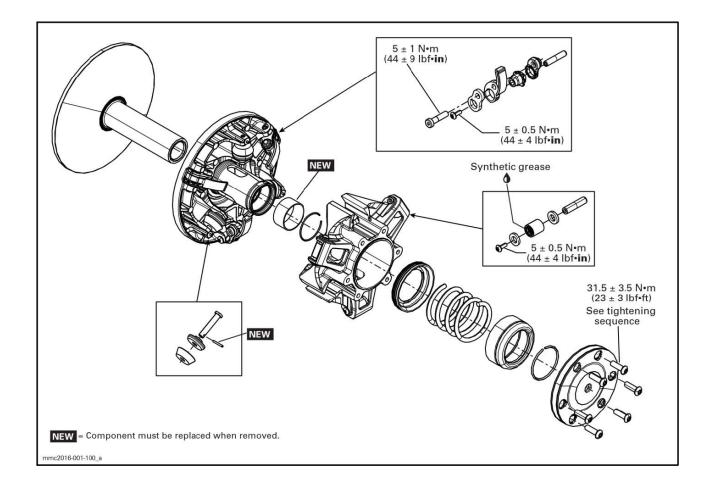
#### OTICE

During installation of the governor cup, make sure to correctly position all inner and outer thrust rollers. Ensure the inner thrust rollers are positioned inside the sliding tracks of the governor cup.



THRUST ROLLER - GOOD INSTALLATION

- 1 Thrust rollers
- 2 Inner thrust roller inside sliding track



#### KWI PDRIVE PRIMARY CLUTCH REBUILD KIT PARTS INCLUDED

PART DESCRIPTION	QTY	OEM PART #	OUR PART #
CONE ROLLER SET	3	—	_
ROLL PIN	6	—	—
BEARING THRUST WASHER	2	—	—
TOPAZ ISOFLEX GREASE	1	—	_
GOVERNOR CUP ROLLER SET	3	—	
		_	
			_

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